

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P230982

Luminaire Tested: **ARCH-M-AF48-150-D-U-5WQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-150-D-U-5WQ-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18301 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 151
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



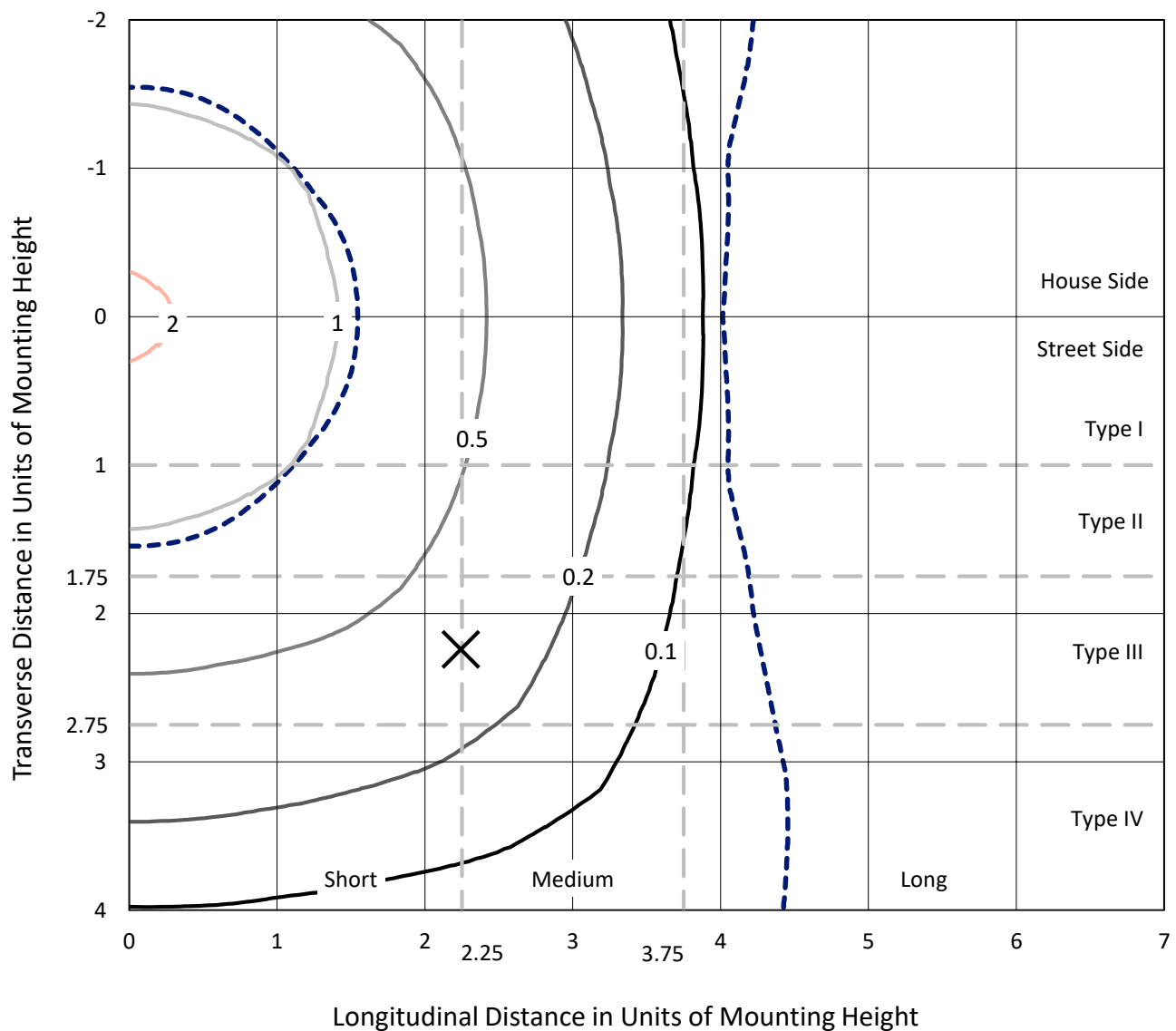
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Iso-Footcandle Lines of Horizontal Illumination

✗ Max cd

--- 1/2 Max cd



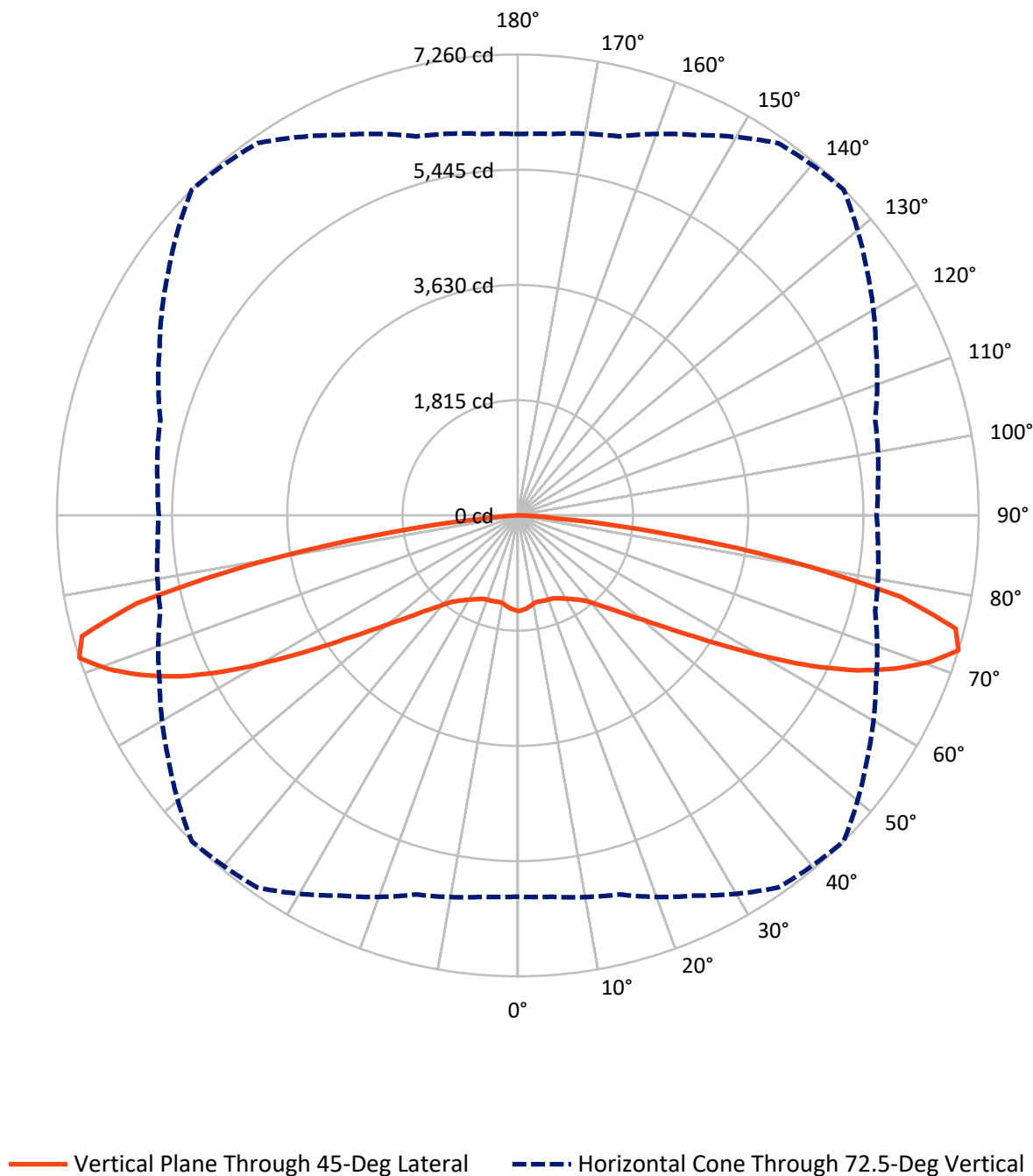
Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

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Luminous Intensity Polar Plot



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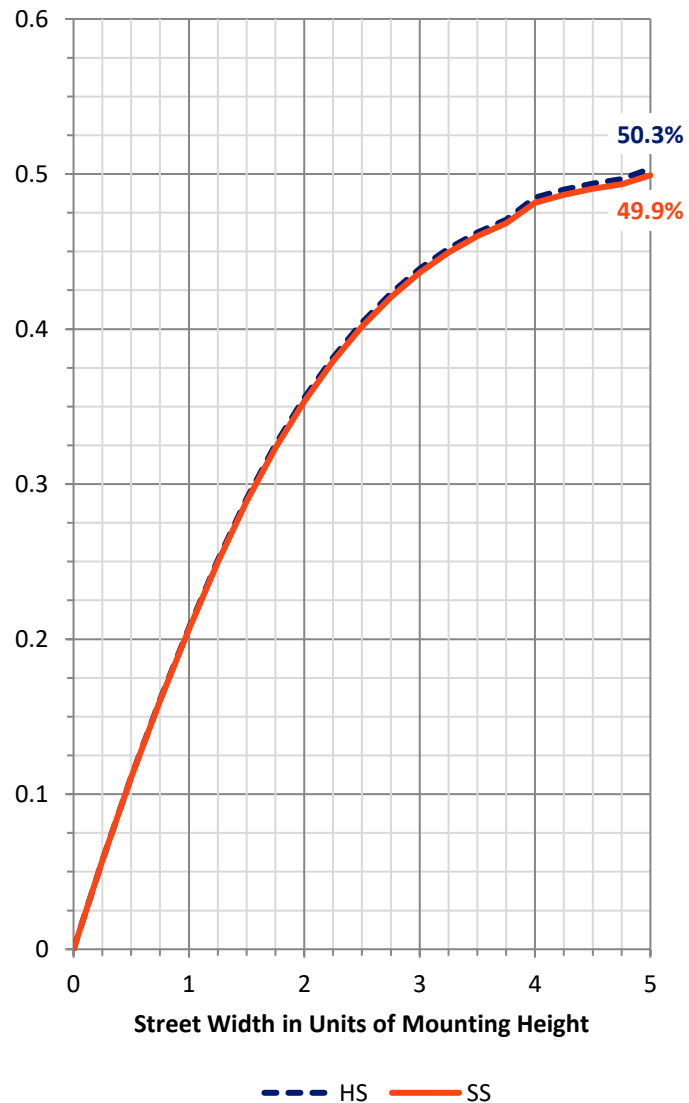
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9150.5	0.0	9150.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9150.5	0.0	9150.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	18301.0	0.0	18301.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	0.8
10°-20°	400.5	2.2
20°-30°	670.2	3.7
30°-40°	1029.7	5.6
40°-50°	1704.9	9.3
50°-60°	3031.0	16.6
60°-70°	5302.7	29.0
70°-80°	5395.1	29.5
80°-90°	628.2	3.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	18301.0	100.0
0°-180°	18301.0	100.0

Coefficient of Utilization



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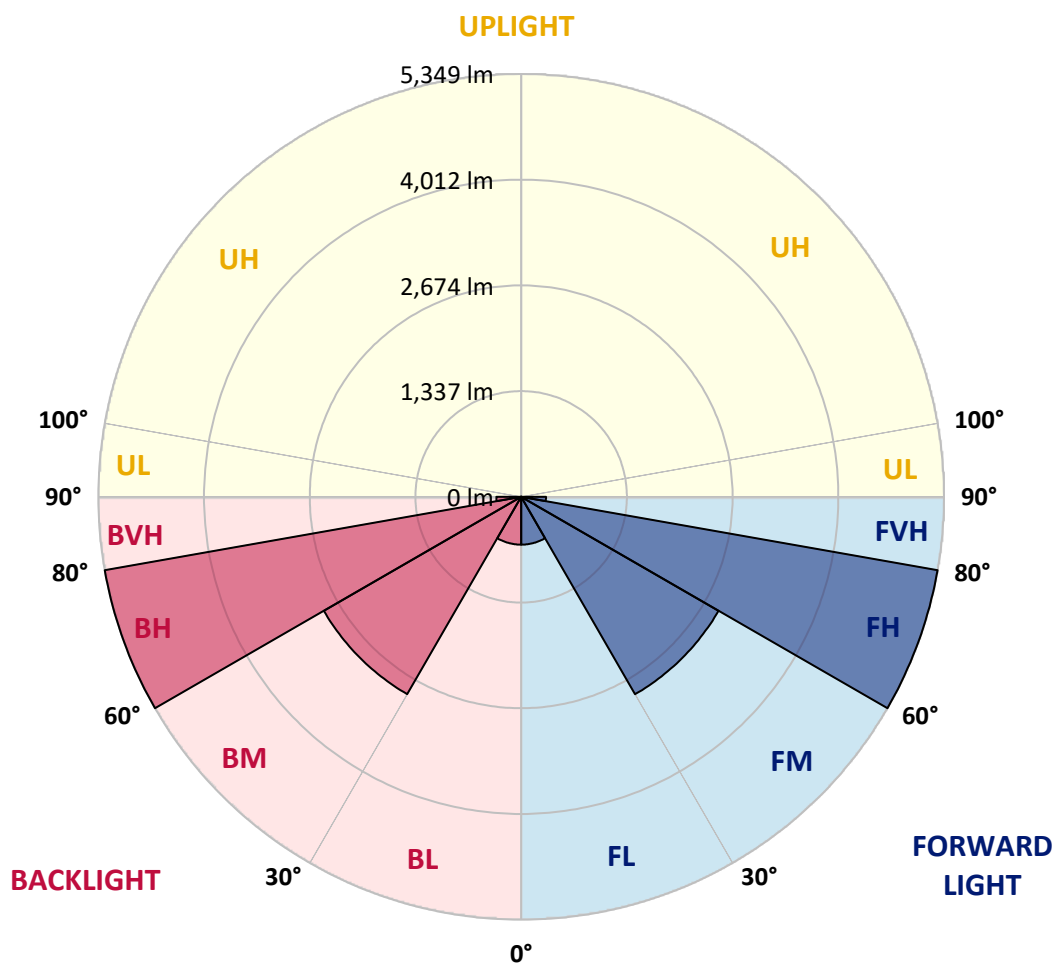
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	604.7	3.3			
FM	(30°-60°)	2882.8	15.8			
FH	(60°-80°)	5348.9	29.2			G3/7500
FVH	(80°-90°)	314.1	1.7			G3/500
BL	(0°-30°)	604.7	3.3	B2/1000		
BM	(30°-60°)	2882.8	15.8	B3/5000		
BH	(60°-80°)	5348.9	29.2	B5		G3/7500
BVH	(80°-90°)	314.1	1.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1494.5	1498.0	1491.0	1491.0	1491.0	1487.5	1491.0	1487.5	1491.0	1494.5	1494.5
5°	1480.6	1480.6	1473.6	1473.6	1473.6	1470.1	1473.6	1473.6	1477.1	1480.6	1480.6
7.5°	1449.2	1449.2	1445.7	1442.2	1438.8	1438.8	1442.2	1442.2	1445.7	1449.2	1449.2
10°	1431.8	1428.3	1421.3	1410.9	1407.4	1403.9	1410.9	1417.9	1428.3	1438.8	1435.3
12.5°	1424.8	1421.3	1407.4	1397.0	1390.0	1393.5	1400.4	1407.4	1424.8	1435.3	1431.8
15°	1431.8	1424.8	1407.4	1390.0	1393.5	1400.4	1407.4	1407.4	1428.3	1438.8	1438.8
17.5°	1431.8	1428.3	1407.4	1393.5	1397.0	1407.4	1410.9	1407.4	1424.8	1442.2	1442.2
20°	1435.3	1435.3	1407.4	1397.0	1400.4	1410.9	1414.4	1410.9	1424.8	1445.7	1445.7
22.5°	1442.2	1438.8	1410.9	1403.9	1410.9	1417.9	1421.3	1417.9	1431.8	1449.2	1452.7
25°	1456.2	1449.2	1424.8	1421.3	1435.3	1445.7	1445.7	1438.8	1445.7	1463.1	1463.1
27.5°	1473.6	1470.1	1442.2	1442.2	1459.7	1480.6	1470.1	1456.2	1463.1	1480.6	1480.6
30°	1504.9	1501.5	1473.6	1473.6	1498.0	1522.4	1498.0	1480.6	1491.0	1508.4	1511.9
32.5°	1550.2	1550.2	1525.8	1518.9	1560.7	1571.1	1560.7	1525.8	1532.8	1557.2	1557.2
35°	1626.9	1619.9	1595.5	1592.0	1633.8	1630.4	1626.9	1595.5	1602.5	1630.4	1630.4
37.5°	1727.9	1724.4	1703.5	1693.1	1714.0	1700.0	1707.0	1693.1	1710.5	1731.4	1734.9
40°	1856.8	1853.3	1835.9	1822.0	1828.9	1808.0	1815.0	1822.0	1839.4	1853.3	1856.8
42.5°	2017.0	2017.0	1999.6	1975.2	1964.8	1954.3	1954.3	1968.3	1985.7	2003.1	2003.1
45°	2215.6	2215.6	2194.7	2170.3	2139.0	2121.6	2128.5	2142.5	2163.4	2184.3	2191.2
47.5°	2449.0	2449.0	2421.1	2396.8	2365.4	2344.5	2344.5	2351.5	2382.8	2400.2	2410.7
50°	2710.3	2699.8	2672.0	2647.6	2630.2	2602.3	2605.8	2602.3	2630.2	2654.6	2661.5
52.5°	2982.0	2978.5	2950.7	2943.7	2954.1	2940.2	2940.2	2905.4	2915.8	2929.8	2926.3
55°	3319.9	3309.5	3285.1	3299.0	3340.8	3361.7	3354.8	3299.0	3267.7	3274.6	3271.2
57.5°	3689.2	3678.8	3671.8	3713.6	3807.6	3894.7	3877.3	3748.4	3689.2	3692.7	3696.2
60°	4065.4	4065.4	4086.3	4190.9	4392.9	4535.7	4483.5	4267.5	4163.0	4142.1	4135.1
62.5°	4452.1	4462.6	4507.9	4682.0	4992.1	5229.0	5096.6	4790.0	4633.3	4591.5	4577.5
65°	4901.5	4912.0	4978.2	5194.1	5605.2	5887.4	5661.0	5371.8	5152.3	5065.3	5051.3
67.5°	5553.0	5559.9	5612.2	5821.2	6207.9	6434.3	6200.9	5943.1	5706.2	5605.2	5598.3
70°	6138.2	6145.2	6190.5	6465.7	6821.0	6901.1	6643.4	6315.9	6068.5	5988.4	5974.5
72.5°	6005.8	6030.2	6180.0	6608.5	7155.5	7260.0	6716.5	6225.3	5828.2	5695.8	5654.0
75°	5037.4	5075.7	5312.6	5957.1	6828.0	7124.1	6284.5	5382.3	4790.0	4535.7	4469.5
77.5°	2940.2	3083.0	3490.6	4316.3	5559.9	6162.6	5176.7	3940.0	2943.7	2525.7	2386.3
80°	804.7	881.4	1177.5	1985.7	3487.2	4316.3	3302.5	1808.0	975.4	731.6	679.3
82.5°	254.3	337.9	428.5	571.3	1369.1	2274.8	1226.3	533.0	418.0	344.9	306.6
85°	135.9	146.3	240.4	278.7	411.1	637.5	379.7	278.7	250.8	184.6	174.2
87.5°	69.7	73.2	135.9	135.9	181.2	149.8	163.7	149.8	142.8	90.6	80.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)